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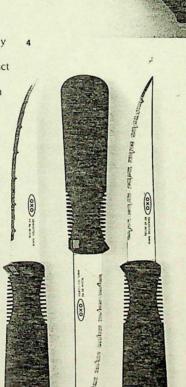
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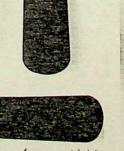
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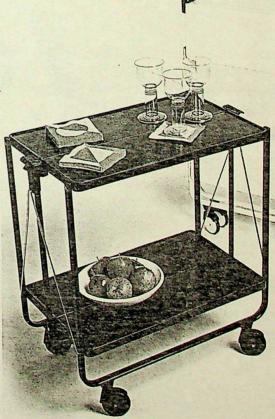
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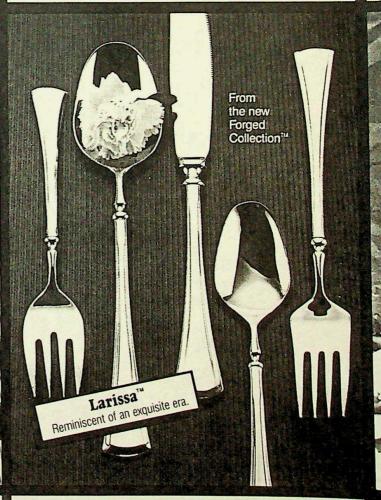
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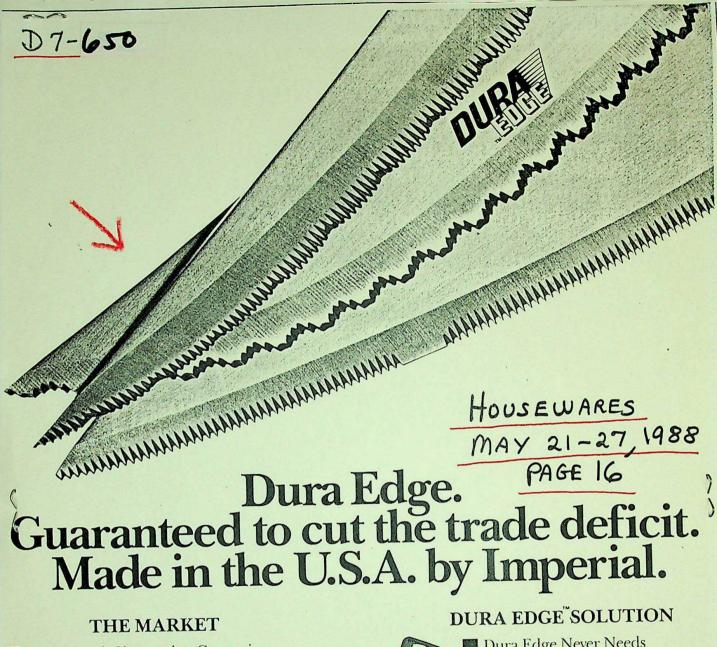
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May 21-27, 1988

Cutlery Makers Carve Out Their Markets

HOUSEWARES® Exclusive Report

WAUSAU, WI-Despite acquisitions in the cutlery industry, brand names and cutlery lines have survived. A look at key transactions— Fiskars acquiring Wilkinson Sword and Gerber Legendary Blades, Regent Sheffield merging with Wiltshire, Russell Harrington Cutlery joining forces with Washington

cutlery manufacturers are looking to grow distribution by offering estab-lished brands at a variety of price-

Cutting Through The Fog
To keep retailers' confusion to a minimum over who's getting what product line for what distribution, manufacturers differentiate product through packaging or brand name

tempting to offer the different channels of distribution quality product at a margin without confusing the con-sumer. Said Mike Vierzba, director of marketing for Fiskars, "You can't confuse the issue of who you are to the consumer. You almost need to estab-lish separate companies or brands." Fiskars, Vierzba said, has at-

tempted to supply the middle market

acquisitions of Gerber Legendary Blades and, most recently, Wilkinson Sword. Vierzba said the company is attempting something no other cutlery manufacturer has tried before-"pricepoint management."

Although Vierzba said no other cutlery manufacturer has tried this, some would beg to differ.

Lifetime Cutlery's Jeff Siegel, ex-

ecutive vp, said the company has 12 proprietary brands under which it sells cutlery, with distribution "primarily to department and specialty stores in the moderate to upper mid-dle range," while offering product for the entire retail spectrum.

Siegel said Lifetime offers more

than 700 lines of cutlery, with the balance of business being done in private label lines for levels of trade other than the middle market. Said Siegel, "This enables the company to sell to lower and higher end markets, without upsetting the mid-range re-

Robinson Knife also offers different lines for different channels of distribution, said Robinson Senior VP Lenny Yablonka. "In distributing this (cutlery), one line would have a rosewood handle, the other a robinwood handle, the robinwood being the more expensive for a better chan-nel of distribution."

Washington Forge is attempting to keep the different channels of distribution happy by varying the packaging for each type of retail situation. Said VP Dick Murphy, "We do get requests (from retailers) to put it (cutlery compositions) into a different box. It can be done. It's not impossible, but you have to do it early in the game

Selective Sales

Some cutlery manufacturers opt not to cover the bulk of the business, and stick to only one end of the retail spectrum. J.A. Henckels supplies to what Robert Topazio, national sales manager, called a "controlled distri-bution." Department and specialty stores are the high-end manufacturer's primary channels, while catalogers, hardware outlets, military, premium and a personal care line for drug stores are also addressed.

With cutlery manufacturers now offering a variety of product for a variety of distribution channels, wading through who offers what for whom can get confusing.

The accompanying chart attempts to break down the cutlery mar-ketplace by identifying key manufac-turers, brand names offered by each, channels of distribution addressed by their individual lines and suggested retail pricepoints. The suggested retails column gives only a price range from the least expensive piece, usually a three-inch paring knife, to the most expensive piece, usually a 10-inch chef's knife.

Set composition suggested retails are also representative of the least to most expensive sets available. This chart does not encompass all manufacturers nor cutlery lines offered. It is intended to highlight key lines from well-known suppliers.

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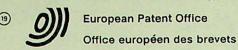
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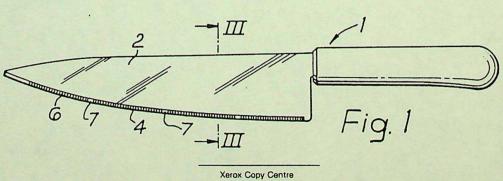
Applicant: RICHARDSON SHEFFIELD LIMITED Upper Allen Street Sheffield S3 7GX(GB)

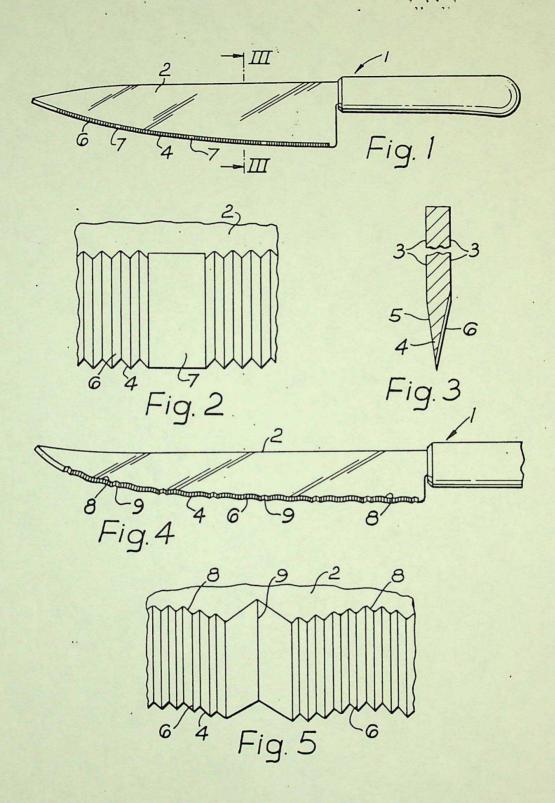
Inventor: Hahn, Jerome Samuel 20469 Woodbridge Lane Boca Raton Florida(US)

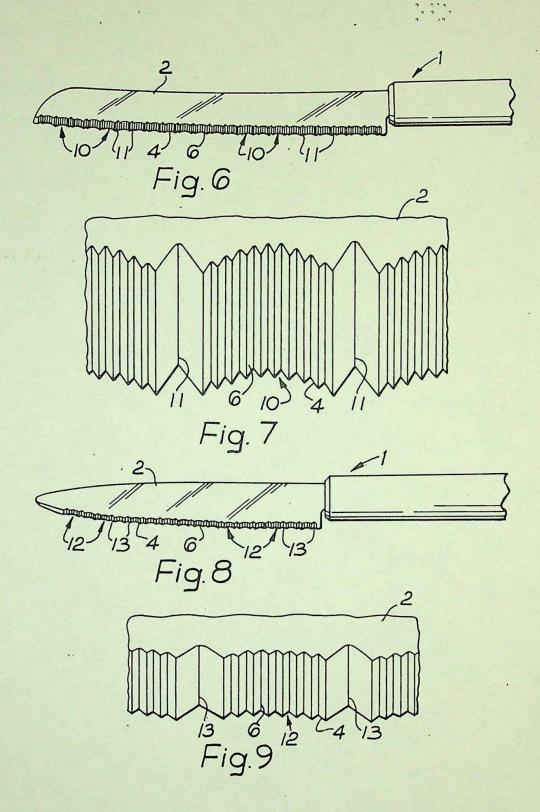
Representative: Houghton, David et al Hulse & Co. Cavendish Buildings West Street Sheffield, S1 1ZZ(GB)

M Knives.

(57) The invention relates to knives and in particular to knives of the type of construction described and claimed in British Patent No 2108887, where the blade has a V-shaped cutting edge centrally located on a parallel sided blank with the edge flat ground to one side and ground with formulations such as serrations or serrations and scallops. The object of the invention is to improve such knives by increasing the strength at the cutting edge, which objective is met by a construction where along that side of the Vshaped cutting edge provided with formulations a number of interruptions are provided in spaced relationship along the length of the cutting edge. The interruptions can take the form of areas free from formulations or can take the form of single large serrations spaced along the length of the cutting edge.







EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT				EP 86104733.0
Category	Citation of document with of relev	h indication, where appropriate, ant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.4)
x	US - A - 2 059 43	14 (TAYLOR)	1,3,4	В 26 В 9/02
Α	GB - A - 257 465 * Totality *	(GILLOTT)	2	
D,A	GB - A - 2 108 88 RICHARDSON LTD.) * Totality *	37 (WESTALL	5,6,7,8,9	
				TECHNICAL FIELDS SEARCHED (Int. C1 :
				B 26 B 9/00
	The present search report has b	een drawn un for all claims		
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	Place of search	Date of completion of the search	h	Examiner

particularly relevant if taken alone particularly relevant if combined with another document of the same category technological background non-written disclosure intermediate document

I : theory or principle underlying the invention
 earlier patent document, but published on, or after the filing date
 O : document cited in the application
 L : document cited for other reasons

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KNIVES

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This invention relates to knives, and is particularly, though not necessarily exclusively concerned with domestic knives such as would be used, e.g., in the kitchen.

It has been long recognised that the cutting performance of a knife can be enhanced or made to suit a particular cutting purpose by providing at the cutting edge a formulation such as serrations or scallops. However whilst such formulations can improve considerably the cutting action, they have the disadvantage of not readily being resharpenable and have a tendency to tear rather than cut clean. Because the creation of formulations such as serrations or scallops involves a separate grinding step in the production of knife blades, this has the effect of increasing production costs, and yet produces a blade which may not have the total life of a conventional blade by virtue of the difficulties of resharpening. It is, therefore, most important that the production costs of a blade with edge formulations are kept to a minimum, whilst providing adequate cutting life and improved cutting performance.

A construction embodying edge formations in the form of serrations and/or scallops is described and claimed in British Patent No. 2108887, where a blade has a V-shaped cutting edge, centrally located on a parallel-sided blank, the cutting edge being flat ground to one side of the Vee and ground with formulations to the opposite side of the Vee. Such a construction has proved to be most effective in providing an exceedingly sharp cutting edge that retains its sharpness for considerable periods, and can be resharpened.

The object of the present invention is to provide still further improvements to a knife blade of the type defined above.

According to the present invention, a knife comprises a blade having formations at its cutting edge to assist the cutting action, said edge being V-shaped and centrally located on a parallel sided blank, and being flat ground to one side of the Vee and ground with formations to the opposite side of the Vee, there being a number of interruptions to the formations, in spaced relationship along the length of the cutting edge.

Thus, the interruptions can take the form areas where no formations are provided, or can take the form of a number of single large serrations. In both instances, the interruptions add noticeably to the strength of the cutting edge at the tip of the Vee, assisting considerably in the prevention of flexing of the blade at the tip of the Vee as can occur particularly when cutting relatively tough materials. Both types of formations also assist in clearing

debris from the bottom of the cut being produced by the blade. Interruptions in the form of single large serrations have the still further advantage of providing a buffer between the material being cut and the cutting edge immediately alongside each large serration that gives protection to the cutting edge to maintain the sharpness of the cutting edge, but without impairing the cutting action.

Preferably, the formulations are scallops and/or serrations.

Thus, the invention utilises conventional parallel sided blanks, and has a centrally located cutting edge, with the grinding of edge formulations to one side only. Such a blade, therefore, combines relatively low costs of production with the retention of improved cutting performance.

It has been found that the angle of the V-shaped cutting edge, and the scallops and/or serrations ground to one side of the V-shaped cutting edge have a marked effect on the cutting performance of the blade. It is therefore an important aspect of the present invention that the V-shaped cutting edge has an included angle between 14° and 30°. Preferably the included angle lies between 16° and 22°, it being further preferred that the included angle lies between 18° and 20°.

It is yet another important aspect of the invention that serrations are ground to one side of the Vshaped cutting edge, there being from 25 to 50 serrations per inch and preferably 40 serrations per inch, between the interruptions, it being further preferred that the included angle of the serrations lies between 80° and 100° and still further preferably 90°. To ensure that the serrations do not produce a saw blade effect, great care has to be taken to produce serrations which, when viewed from the flat ground side of the blank, only marginally protrude above the general level of the edge of the blade. Because the V-shaped cutting edge is flat ground to one side, and the serrations only protrude marginally, the knife can be resharpened by regrinding by hand or otherwise, the flat ground surface of the V-shaped cutting edge.

It is a still further important aspect of the invention that in addition to serrations, scallops can be ground on the same side of the V-shaped cutting edge. Thus, to provide a general purpose knife, one scallop can be provided between adjacent, spaced interruptions, e.g. having a radius in the range 0.1" to 0.25". Preferably the radius is 0.16". The scallops may have pitch in the range 2.0 to 10 and preferably 5 T.P.I. It is further preferred that the serrations, when scallops are present, have an included angle between 50° and 90°, with a still further preference of 60°. When a heavier cutting

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action is required, e.g. for bread and the like, again a single scallop can be provided between spaced interruptions, and when the scallops can have a radius of 0.15 to 0.5 inch, and preferably 0.25 inch, with a scallop pitch between 1.0 and 6.0 T.P.I. and preferably 4 T.P.I., and where the serrations may be between 25 and 50 T.P.I. and preferably 33 T.P.I.

More than one scallop can be provided between spaced interruptions. Thus, to provide e.g. a carving knife, two scallops can be provided between spaced interruptions, and which may each have, at the cutting edge, a radius in the range 0.625 inch to 1.25 inch and preferably 0.75 inch, and a scallop pitch in the range 1 to 4 T.P.I. and preferably 2 T.P.I. Here the serrations can be as has been mentioned above in relation to the serrated only construction or the single scallop general purpose embodiment.

Four embodiments of the invention will now be described, purely by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a side elevation of a knife displaying a cutting edge in accordance with one embodiment of the invention;

Figure 2 is an enlarged view of part of the cutting edge of Figure 1;

Figure 3 is a section on the line III-III of Figure 1;

Figure 4 is a side elevation of a knife displaying a cutting edge in accordance with a second embodiment of the invention;

Figure 5 is an enlarged view of part of the cutting edge of Figure 4;

Figure 6 is a side elevation of a third embodiment of knife displaying a cutting edge in accordance with the invention;

Figure 7 is an enlarged view of part of the cutting edge of Figure 6.

Figure 8 is a side elevation of a fourth embodiment of knife displaying a cutting edge in accordance with the invention; and

Figure 9 is an enlarged view of the cutting edge of Figure 8.

In Figures 1 to 3, a knife 1 has a blade 2 with parallel sides 3 and a centrally located "V"-shaped cutting edge 4 flat ground to one side 5 and ground with serrations 6 to the other side. The "V"-shaped cutting edge has an included angle between 14° and 30°, preferably 18° to 20° and the serrations are in the range 25 to 50 per inch, preferably 40 per inch. The included angle of the serrations at the cutting edge is between 80° and 100°, preferably 90°.

Along the length of the serrated side of the "V"-shaped cutting edge, a number of spaced interruptions 7 are formed, in this embodiment by leaving a portion of that side of the "V"-shaped

cutting edge unserrated. The presence of the unserrated portions or interruptions 7 adds noticeably to the strength of the cutting edge at the tip of the Vee, and provides considerable assistance in preventing any flexing of the blade at the very tip of the cutting edge particularly when cutting relatively tough materials.

In the second embodiment illustrated in Figures 4 and 5 and suited to use as a carving knife, for convenience the reference numerals of Figures 1 to 3 have been employed for like parts. Thus, again, the knife 1 has a blade 2 with parallel sides 3 and a central V-shaped cutting edge 4 flat ground to one side 5 and formed with serrations 6 to the other side (and is in this regard essentially similar to the construction shown in Figure 3). However, in addition to the serrations 6, that side of the V-shaped cutting edge is ground with scallops 8, each having a radius at the cutting edge between 0.625 inch and 1,25 inch preferably 0.75 inch, and a pitch in the range 1 to 4 and preferably 2 T.P.I. With such scallops present the serrations 6 have an included angle between 50 and 90°, preferably 60°. The interruptions spaced along the length of the central V-shaped cutting edge take the form of large single serrations 9. Adjacent serrations 9 contain two scallops.

Figures 6 and 7 show a third embodiment suited to use as a bread knife, and here again, for convenience, the reference numerals of Figures 1 to 3 have been retained for like parts. Thus, the knife 1 has a blade 2 with parallel sides 3 and a central V-shaped cutting edge 4, flat ground to one side 5 and formed with serrations 6 to the other side. The serrated side of the V-shaped cutting edge being ground with scallops 10. Along the length of the cutting edge large serrations 11 are provided, there being a single scallop 10 between adjacent large serrations. Here it is preferred that the scallops have a radius at the cutting edge in the range 0.15 inch to 0.5 inch and preferably 0.25, and a scallop pitch in the range 1.0 to 6 T.P.I., preferably 4 T.P.I. The serrations 6 are preferably in the range 25 to 50 T.P.I. and further preferably, 33 T.P.I.

Figures 8 and 9 show a fourth embodiment suited for use as a general purpose knife. Here again the reference numerals of Figures 1 to 3 have been retained for like parts.

Thus, a knife 1 has a blade 2 with parallel sides 3 and a central V-shaped cutting edge 4 flat ground to one side 5 and formed with serrations 6 to the other side. The serrated side of the cutting edge is formed with scallops 12, and along the length of the cutting edge, large serrations 13 are provided with a single scallop between adjacent large serrations 13. Here it is preferred that the scallops have a radius in the range 0.1 inch to 0.25

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inch, and more preferably 0.16 inch, and a pitch in the range 2 to 10 T.P.I., more preferably 5 T.P.I., the serrations having an included angle between 50° and 90°, more preferably 60°.

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As with the interruptions 7 of Figure 1, the large serrations 9 and 11 add noticeably to the strength of the blade, and are of considerable assistance in preventing flexing at the tip of the V-shaped cutting edge. The large serrations 9 and 11 have the additional advantage of providing a buffer between the material being cut and the serrations 6 immediately alongside the serrations 9 and 11 that give protection to the cutting edge without impairing the cutting action, and are effective in clearing debris from the bottom of the cut being produced.

Claims

- 1. A knife comprising a blade (2) having formations (6, 8) at its cutting edge to assist the cutting action, said edge being V-shaped and centrally located on a parallel sided blank, and being flat ground to one side (5) of the Vee and ground with formations (6, 8) to the opposite side of the Vee characterised in that there are a number of interruptions (7,9) to the formations (6, 8) in spaced relationship along the length of the cutting edge.
- 2. A knife as in Claim 1, characterised in that the interruptions (7) take the form of areas free from formations.
- 3. A knife as in Claim 1; characterised in that the interruptions (9) take the form of a number of single, large serrations.
- 4. A knife as in any of Claims 1 to 3, characterised in that the formations (6) are in the form of serrations.

- 5. A knife as in any of Claims 1 to 3, characterised in that the formations are in the form of serrations (6) combined with scallops (8), the serrations having an included angle of 60°.
- 6. A knife as in Claim 1, wherein the centrally located V-shaped cutting edge has an included angle between 14° and 30°, preferaly 18° to 20°.
- 7. A knife as in Claim 4, characterised in that there are from 25 to 50 serrations (6) per inch, preferably 40, and the serrations (6) have an included angle between 80° and 100°, preferably 90°.
- 8. A knife as in Claim 5, characterised in that one scallop (8) is provided between spaced interruptions (9) the scallops having a radius in the range 0.1 inch to 0.25 inch, preferably 0.16 inch, and a pitch in the range 2 to 10 T.P.I., preferably 5 T.P.I.
- 9. A knife as in Claim 11, characterised in that the serrations (6) have an included angle between 50° and 90°.
- 10. A knife as in Claim 5, characterised in that a single scallop (8) is provided between spaced interruptions (9), and which have a radius between 0.15 inch and 0.5 inch, preferably 0.25 inch, with a scallop pitch between 1.0 and 6.0 T.P.I. preferably 4 T.P.I. and where the serrations are between 25 and 50 T.P.I., preferably 33 T.P.I.
- 11. A knife as in Claim 5, characterised in that two scallops (8) are provided between spaced interruptions (9), the scallops (8) having a radius at the cutting edge in the range 0.025 inch to 1.25 inch preferably 0.75 inch and a pitch in the range 1 to 4 T.P.I., preferably 2 T.P.I.

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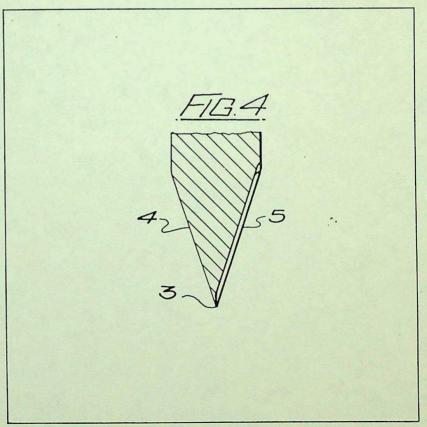
(12) UK Patent Application (19) GB (11) 2 108 887 A

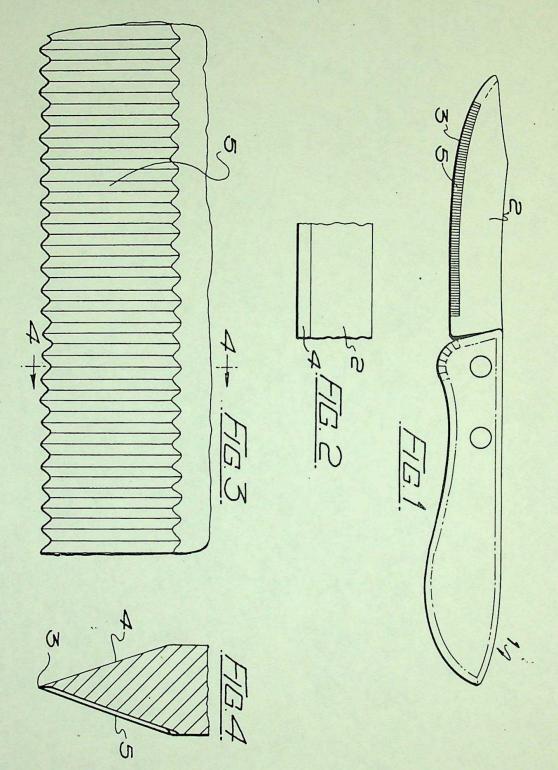
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- (33) United Kingdom (GB)
- (43) Application published 25 May 1983
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- (58) Field of search B4B
- (71) Applicant Westall Richardson (Great Britain), Morpeth Street, Sheffield S3 7GX
- (72) Inventor Jerome Samuel Hahn
- (74) Agent and/or Address for Service Hulse and Co., Cavendish Buildings, West Street, Sheffield, S1 1ZZ

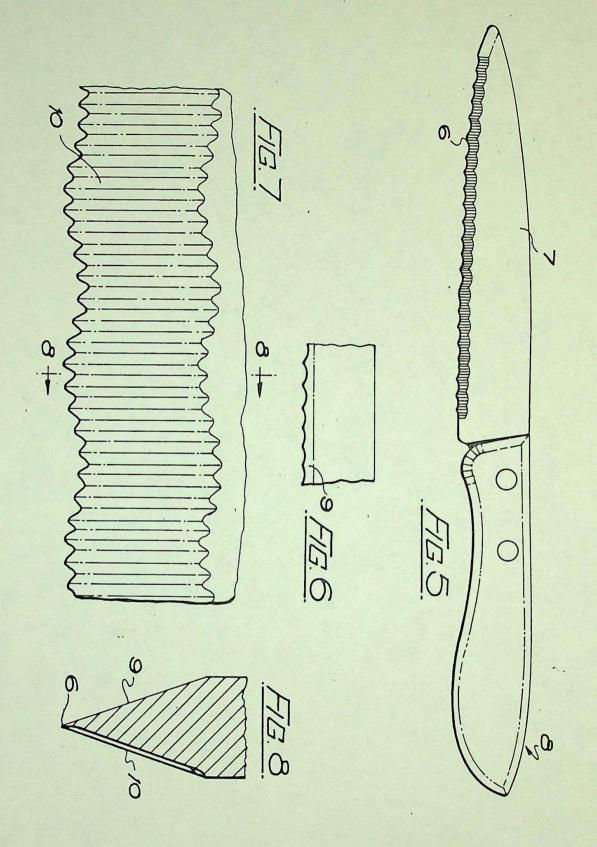
(54) Knives

(57) A knife comprises a blade having a cutting edge 3 of V-shape on a parallel sided blank, the V-shape

being formed by flat grinding to one side 4 of the Vee and grinding with formulations such as scalloping and/or serrations to the opposite side 5 of the







SPECIFICATION Knives

This invention relates to knives, and is particularly, though not necessarily exclusively, 5 concerned with domestic knives such as would be used, e.g., in the kitchen.

It has been long recognised that the cutting performance of a knife can be enhanced or made to suit a particular cutting purpose by providing at 10 the cutting edge a formulation such as serrations or scallops. However whilst such formulations can improve considerably the cutting action, they have the disadvantage of not readily being resharpenable and have a tendency to tear rather

15 than cut clean. Because the creation of formulations such as serrations or scallops involves a separate grinding step in the production of knife blades, this has the effect of increasing production costs, and yet produces a blade which

20 may not have a total life of a conventional blade by virtue of the difficulties of resharpening. It is, therefore most important that the production costs of the blade with edge formulations are kept to a minimum, whilst providing adequate cutting 25 life and improved cutting performance.

Many attempts have been made hitherto, without success to produce an effective (cost and performance) serrated or scalloped blade for a knife. Thus, it is known to take a parallel-sided 30 blank and grind serrations on one side only at an angle, the angular serrations combining with the plain unground face to produce a cutting edge. However by not having the cutting edge centrally of the thickness of the blade, the cutting action is 35 impaired, and is not suited to both left hand and right hand usage. It is also known to grind

serrations to one side only of a blank, the sides of which taper to a centrally arranged cutting edge, but the use of tapered blanks increases noticeably 40 the cutting force required and adds noticeably to the costs of production. It is further known to grind serrations on both faces of a parallel-sided blank to produce a central cutting edge. However this produces what resembles a saw edge with ragged 45 cutting properties.

The object of the invention is to provide a knife having a blade with edge formulations which combines the requirements of improved performance and low costs of production.

50 According to the present invention, a knife comprises a blade having formulations at its cutting edge to assist the cutting action, said edge being V-shaped on a parallel-sided blank, and being flat ground to one side of the Vee and ground 55 with formulations to the opposite side of the Vee. Preferably, the formulations are scallops

and/serrations.

Thus, the invention utilises conventional parallel sided blanks, and has a centrally located 60 cutting edge, with the grinding of edge formulations to one side only. Such a blade, therefore, combines relatively low costs of production with the retention of improved cutting performance.

65 It has been found that the angle of the V-shaped cutting edge, and the scallops and/or serrations ground to one side of the V-shaped cutting have a marked effect on the cutting performance of the blade. It is therefore an

70 important aspect of the present invention that the V-shaped cutting edge has an included angle between 14° and 30°. Preferably the included angle lies between 16° and 22°, it being further preferred that the included angle lies between 18° 75 and 20°.

It is yet another important aspect of the invention that serrations are ground to one side of the V-shaped cutting edge, there being from 25 to 50 serrations per inch and preferably 40 serrations

80 per inch, it being further preferred that the included angle of the serrations lies between 80° and 100° and still further preferably 90°. To ensure that the serrations do not produce a saw blade effect, great care has to be taken to produce

85 serrations which, when viewed from the flat ground side of the blank, only marginally protrude above the general level of the edge of the blade. Because the V-shaped cutting edge is flat ground to one side, and the serrations only protrude

90 marginally, the knife can be resharpened by regrinding by hand or otherwise, the flat ground surface of the V-shaped cutting edge.

It is s still further important aspect of the invention that in addition to serrations, scallops 95 can be ground on the same side of the V-shaped cutting edge. Thus, scallops having a radius in the range 0.1" to 0.25" can be provided. Preferably the radius is 0.16". The scallops may have pitch in the range 2.5 to 10 and preferably 5 T.P.I. It is

100 further preferred that the serrations, when scallops are present, have an included angle between 50° and 70°, with a still further preference of 60°.

Two embodiments of the invention will now be described with reference to the accompanying 105 drawings, in which:-

Figure 1 is a side elevation of a knife with a knife edge in accordance with the invention;

Figure 2 is a side elevation of the opposite side of part of the knife blade of Figure 1;

Figure 3 is an enlarged side elevation of part of the blade edge of Figure 1;

Figure 4 is a section on the line 4—4 of Figure 3;

Figure 5 corresponds to Figure 1 but shows a 115 second embodiment of the invention;

Figure 6 corresponds to Figure 2, but shows the knife blade of Figure 5;

Figure 7 corresponds to Figure 3, but shows the knife edge of Figure 5; and

120 Figure 8 is a section on the line 8—8 of Figure 7.

In Figures 1 to 4, a knife 1 has a blade 2 the cutting edge 3 of which is of V-shape (see particularly Figure 4) formed by flat grinding to 125 one side of the Vee (at 4) and grinding with formulations 5 to the opposite side of the Vee. As is shown particularly by Figure 4, the included angle of the V-shaped cutting edge lies between 18° and 20°. The formulations 5 in Figures 1 to 4 are, as is shown more particularly by Figure 3, serrations that are ground to one side of the V-shaped cutting edge. It is preferred that there are 40 serrations per inch and that the included angle 5 between adjacent serrations is at 90°. To prevent the cutting edge from having a saw-blade effect, the depth of grinding of the serrations 5 is such that when viewed in the direction of Figure 2, the serrations only marginally protrude above the 10 general level of the edge of the blade.

In Figures 5 to 8 there is shown a second embodiment of the invention where the cutting edge 6 of the blade 7 of a knife 8 is formed by a combination of serrations and scalloping. Thus, as is shown particularly by Figure 8, the outline advantage of the service of the service

15 is shown particularly by Figure 8, the cutting edge is again a V-shaped cutting edge with flat grinding at 9 (Figure 6) to one side of the cutting edge and grinding with serrations and scallops 10 to the other side of the cutting edge. Here again as is

20 shown by Figure 8 the V-shaped cutting edge has an included angle between 18° and 20°, and as is indicated in Figure 7 the serrations have an included angle between adjacent serrations of 60° with 40 serrations per inch, and the scallops have

25 a radius of 0.16" and are provided at a rate of 5 per inch. As with the cutting edge of Figures 1 to 4 and to prevent the serrations/scallops from producing a saw-blade effect, the serrations should only marginally protrude above the general 30 level of the edge of the blade.

Knife blades in accordance with the invention successfully combine relatively low production costs with improved performance over conventional blades, and in the preferred forms, a performance considerably better than other forms of blades with edge formulations known hitherto.

CLAIMS

A knife comprising a blade having formulations at its cutting edge to assist the
 cutting action, said edge being V-shaped on a parallel-sided blank, and being flat ground to one side of the Vee and ground with formulations to the opposite side of the Vee.

2. A knife as in Claim 1, wherein the formulations are scallops and/or serrations.

3. A knife as in Claim 1 or Claim 2, wherein the

V-shaped cutting edge has an included angle of between 14° and 30°.

4. A knife as in any of claims 1 to 3, wherein 50 the V-shaped cutting edge has an included angle of between 16° and 22°.

5. A knife as in any of Claims 1 to 4, wherein the V-shaped cutting edge has an included angle of between 18° and 20°.

6. A knife as in any of Claims 2 to 5, wherein between 25 to 50 serrations per inch are ground to one side of the V-shaped cutting edge.

7. A knife as in any of Claims 2 to 6, wherein 40 serrations per inch are ground to one side of

60 the V-shaped cutting edge.

8. A knife as in any of Claims 2 to 7, wherein the serrations have an included angle of between 80° and 100°.

9. A knife as in any of Claims 2 to 8, wherein 65 the serrations have an included angle of 90°.

10. A knife as in any of Claims 2 to 9, wherein the serrations are ground such that when viewed from the flat ground side of the blank they only marginally protrude above the general level of the 70 edge of the blade.

11. A knife as in any of Claims 2 to 10, wherein scallops having a radius of 0.1" to 0.25" are ground to one side of the V-shaped cutting edge.

12. A knife as in any of Claims 2 to 11, wherein75 scallops having a radius of 0.16" are ground to one side of the V-shaped cutting edge.

13. A knife as in any of Claims 1 to 12, wherein the scallops have a pitch in the range 2.5 to 10 per inch.

80 14. A knife as in any of Claims 2 to 13, wherein the scallops have a pitch of 5 per inch.

15. A knife as in any of Claims 2 and 11 to 14, wherein the serrations have an included angle of between 50° and 70°.

16. A knife as in any of Claims 2 and 11 to 15, wherein the serrations have an included angle of 60°.

17. A knife substantially as hereinbefore described with reference to Figures 1 to 4 of the90 accompanying drawings.

18. A knife substantially as hereinbefore described with reference to Figures 5 to 8 of the accompanying drawings.

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MOUNT VERNON, N.Y. - Consumers Union tested the safety features on 18 kerosene heaters and found the Koehring Deluxe KR D 93 and Sears catalog number 40204 "not acceptable."

All 18 models were "judged inherently hazardous; they should be used with extreme care." according to the October issue of Consumer Reports. "Because of the pollutants these devices add to air. CU recommends t use of a kerosene heater ople with certain health . . and pregnant womn and the elderly."

> iring and Sears models acceptable" also "prerious fire hazard," o Consumer Reports. ed over in CU's tests,

they continued to burn and leaked appreciable quantities of fuel."

Consumers Union tested the safety devices on the 18 kerosene heaters by tipping each unit partway over at first, then over fully. While the flame-cutoff mechanism worked on every heater. the "cutoff was less than perfect" on the Koehring and Sears units, which use the same wick.

The Koehring heater was tipped three times; twice the flame continued to burn and once the flame went out after about 30 seconds. according to Consumer Reports.

"The cutoff switch on the Sears worked just fine when we tipped it; the flame went out. But when we exchanged wicks in those two models, the Sears continued burning when it was tipped over and

the Koehring didn't."

BOTH UNITS were judged not acceptable because a "safe wick could be replaced by an unsafe one in due course," Consumer Reports stated.

The Koehring and Sears heaters not only kept on burning, they also leaked fuel when tipped over. "The kerosene soaked into a rug put under the heaters for this test: the flame from the heater set fire to the rug in about three minutes."

Nine other heaters, eight of them radiant models, were given a low mark in the fire hazard column in Consumer Reports' ratings because they "leaked kerosene when we tipped them more than 60 degrees. None of the

nine continued to burn, however," CR said.

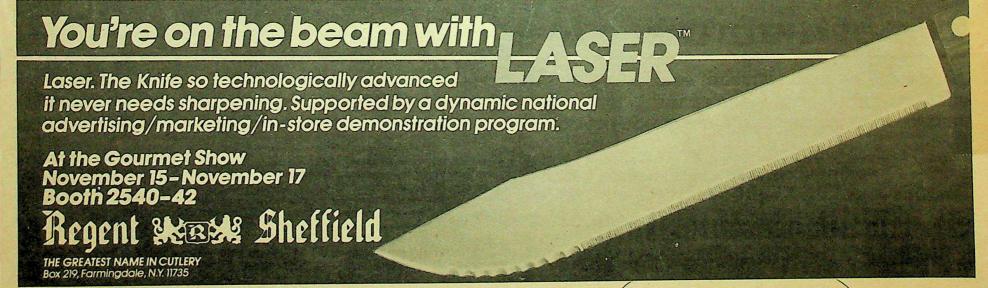
The heaters given a low rating in the fire hazard column were: the Kero-Sun Omni 105; Aladdin Temp-Rite 9; Glo-International Corona SP-DX; Heat Mate D670GED; Kero-Sun Radiant 10: Kero-Sun Radiant 36; Radiant King RK 100S; Sanyo OHR G28H, and Yuasa J-20. All but the Kero-Sun Omni 105 and Kero-Sun Radiant 10 have removable fuel tanks.

THE OTHER heaters tested were the Glo-International Corona 22DK; Koehring Magnum KCM 200; Sears catalog number 40305, and Yuasa J-50 convective-type heaters plus the Aladdin Equator S581U; Radiant King RK 500C,

See CU: KEROSENE, Page 50

- · Wanamaker's woos new consumers. Page 40.
- Best sellers '82: a retail survey. Page 44.
- · Earl Lifshey on Woolco closing. Page 45.

OCT. 4, 1982



ZIP STATE PHONE NUMBER (

SEPT. 1, 1981 p.61

R& Food Business

PROFILE

Local boy comes home to Indiana

Can a 30-year-old restaurant and hotel executive, trained in Austria, Switzerland and South Africa, find happiness at a 71-year-old seafood dinner house in Hammond, Ind.?

Yes, indeed, says Mike Probst, who purchased the landmark Phil Smidt & Son restaurant last fall.

"I love this operation," says Probst of the 450-seat restaurant.

But Probst also admits that he "never dreamt [he] would return to the United States" let alone find satisfaction at a limited-menu dinner house in Hammond, Ind.

Probst grew up in Highland, Ind., (not far from Hammond) with a dream of running a fine hotel.

His father, an executive with Standard Oil of Indiana, was an "outstanding cook." A neighbor owned a restaurant.

When Probst was 15, his family

spent a year in Europe.

"I loved the food," he says, "and was impressed that in Europe, people who worked in the hotel and restaurant business were considered true professionals. That wasn't true at the time in the United States."

So, at the age of 17, Probst packed his bags and headed out for Austria to a hotel and culinary school in the town of Bad Hofgastein.

Probst spent three years at the school, working summers in other facilities in Switzerland and Austria.

wasn't Europe apparently enough to satisfy Probst's wanderlust. For his first job after school, he traveled to Port Elizabeth, South Africa, to help open a new hotel.

After four years of traveling, however, Probst was getting a little homesick. He returned to the United States and took a job with the Hyatt Regency O'Hare in Chicago.

After a year with Hyatt, Probst moved to Los Angeles, where he helped Holiday Inns open a new airport hotel. He then spent nine months in Holiday Inns' corporate

headquarters in Memphis.

At that point, Probst was concentrating in front desk and other room-related positions. During his next job, at the Hampshire House in Chicago (now The Raphael), he decided food and beverage, restaurants, was what he

really enjoyed doing.

So he went to work for Restaurant Associates, which at that time was operating the President's Restaurant in the space now occupied by Nick's Fishmarket.

When the President's closed, Probst took what he thought was a temporary job managing Phil

Smidt's.

"Peter Smidt has just donated the restaurant to Calumet College. The understanding was the college would quickly sell it."

A few months stretched into four

vears.

"The place had some real problems," Probst says. "Poor supervision and a lack of controls meant poor food and poor service."

While Probst was working to right the restaurant's problems, he also was falling in love.

"This place is unique and steeped

in tradition," he says.

Probst's respect for this tradition has kept him from changing much.

"I'd be a fool to change any of it," he says.

The Phil Smidt signature item is lake perch, fried, buttered and deboned. More than half of the restaurant's customers order this item. During the busy summer months, the restaurant serves 5,000 lb. of perch a week.

Other popular menu items are frog legs and chicken. The menu also includes walleye pike, shrimp and crab legs, one of the few items Probst has added to the menu.

The relishes and potato salad are made according to old Smidt family

recipes.

But if Probst depends on old-fashioned recipes to please his customers, he also backs up those recipes with modern management techniques.

The implementation of controls and some judicious advertising have helped Probst boost the restaurant's volume from \$1.4 million in 1977 to \$2.5 million last

"The restaurant slump hasn't

affected us a bit," he says.

As Probst celebrates the birth of his first child, a son, and prepares for Phil Smidt's 71st anniversary, he admits he's feeling right at home in Indiana.

"I'd like to pass this restaurant on some day," he says.



D7/142 (other side) AVON page 18

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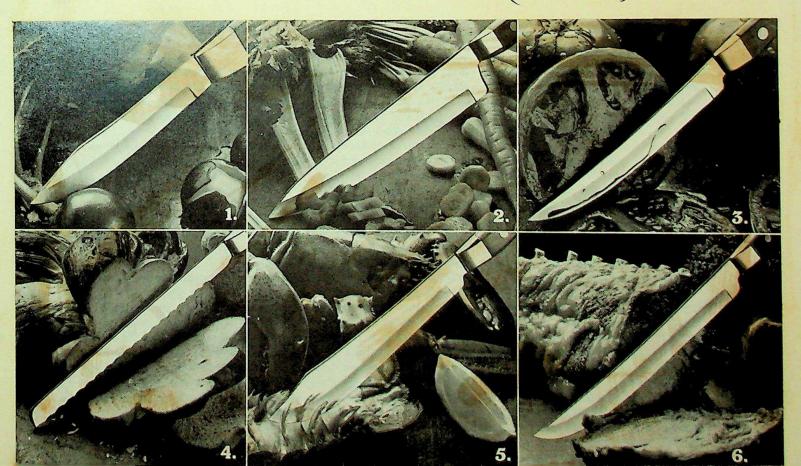


Porcelain Bowl Genuine porcelain with a 1790's Chinese porcelain-inspired floral motif and plastic stand. Shape inspired by the classic Paul Revere bowl. 6" x 4". Reg. \$25.00

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Govrmet AFRIL, 1973 P. 41

(page top)



Our Chef's Tools. GOURMET Because what's good for the goose APRIL, 1973 isn't good for the green beans. P. 41

Any chef will tell you that when food isn't cut properly, it doesn't cook properly.

This is why Carvel Hall, one of the leading names in cutlery since 1895, has now crafted a special collection of knives to help you in preparing your meals at home.

1. Our Paring Knife. What this knife really does is make small work into short work. It's great for trimming, coring, boning and scraping. And for some of the more artful tasks like making pickle fans, radish roses and celery curls.

2. Our Chef's Knife. Its chopping power makes this a great salad, stew and casserole maker.

The length of the blade allows you to place 8-10 pieces of celery, carrots, beans, etc; on a cutting board and dice them 8-10 times faster.

In addition, this knife takes the hassle out of preparing French fries, out of scalloping, chopping nuts or candied fruits.

3. Our Utility-Knife. This knife gives you the blade

you need to tackle tough-to-peel-and-slice things like eggplant, pineapple and tomatoes.

And because it's constructed like a small carving knife, it's excellent for boning and for trimming excess fat and gristle off meats.

4. Our Scalloped Slicer. We put scallops on our slicer because for slicing soft foods, you need a knife that works something like a saw.

It lets you slice, instead of crush, fruits, vegetables and baked goods.

And if there were such a thing as speed records for slicing through boneless meats and fowl, this knife would hold them all.

5. Our Butcher Knife. Use this knife for all the heavy-work your butcher doesn't do for you. For preparing pork loins, chuck roasts, for cutting anything from rump to brisket to

lobster, or for disjoining fowl.
Or for even cleaving
easily and

safely through all of the larger fruits and vegetables.

6. Our Carving Knife. Our Carving Knife takes up where our slicer leaves off. At bones.

It comes to a point.

And a point is the only way to get around a bone without making mincemeat of your roast or chicken. This knife, like the rest, not only looks beautiful, but more importantly, works beautifully.

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Rich Paccawood inserts are double riveted to our triple plated handles. They can't come loose. They're also impervious to burns, stains, warping and even dishwashers.

If you would like to find out where you can buy our Chef's Tools in the new Connoisseur pattern shown, please write Carvel Hall, Crisfield, Maryland 21817.

3 pc. set, \$19.95 (Parer, Carver, Utility).

5 pc. set, \$34.95 (Parer, Carver, Utility, Chef's Knife, Scalloped Slicer).

6 pc. set, \$39.95 (Parer, Carver, Utility, Chef's Knife, Scalloped Slicer, Butcher Knife);

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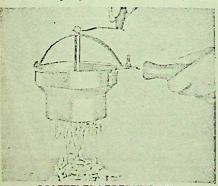
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"Pony Boy"... Pony Boy—you're a real travel joy!" Lightweight, genuine natural sheepskin bag with handsome dark brown pony-skin trim, totes all your needs for overnight, for sports activities, etc. 18" x 10½" x 8"—lined roomy interior that expands to your demands! Heavy-duty solid brass zipper with lock, belted top, side handle.

1710 "Pony Boy" Underseater



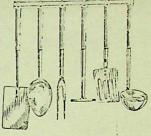
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7056 Teak Sniffer—9 oz. 41%" ht. \$4.98

Teak Sniffer-9 oz. 41/2" ht. Teak Sniffer-55 oz. 8" ht.

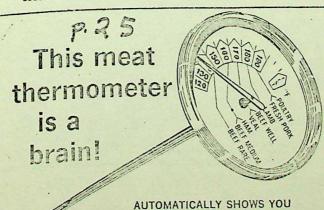
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The most unique plates in the world! Traditional over the centuries in Korea for table use Each hand hewn and carved by the artful stone cutters of the Hermit Kingdom from Agate, the same stone used as semi-precious gems. They are of polished marbelized black gray and white with streaks of russet and yellow. They have an almost etheral quality—like viewing the astral beauties of the heavens in the dark of night. No two are alike, of course, and our supply, by their very nature is limited so orders are filled on a first come first served basis—order yours now. 10" diameter, 1/2" thick with self-rimmed border. A rare find for those who dare to be different, appreciate the uncommon, and whose distinctive taste makes for adventurous living.

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AUTOMATICALLY SHOWS YOU WHEN MEAT IS READY

'Good chefs know—accuracy in timing and temperature are what separates the \$10 dinner from the \$2.50 blue plate! Now you can roast your beef, pork, lamb, veal, poultry to tender, succulent, flavor-rich perfection, crisp outer slices, moist red centers... stainless steel meat thermometer, virtually won't let you overcook or undercook.

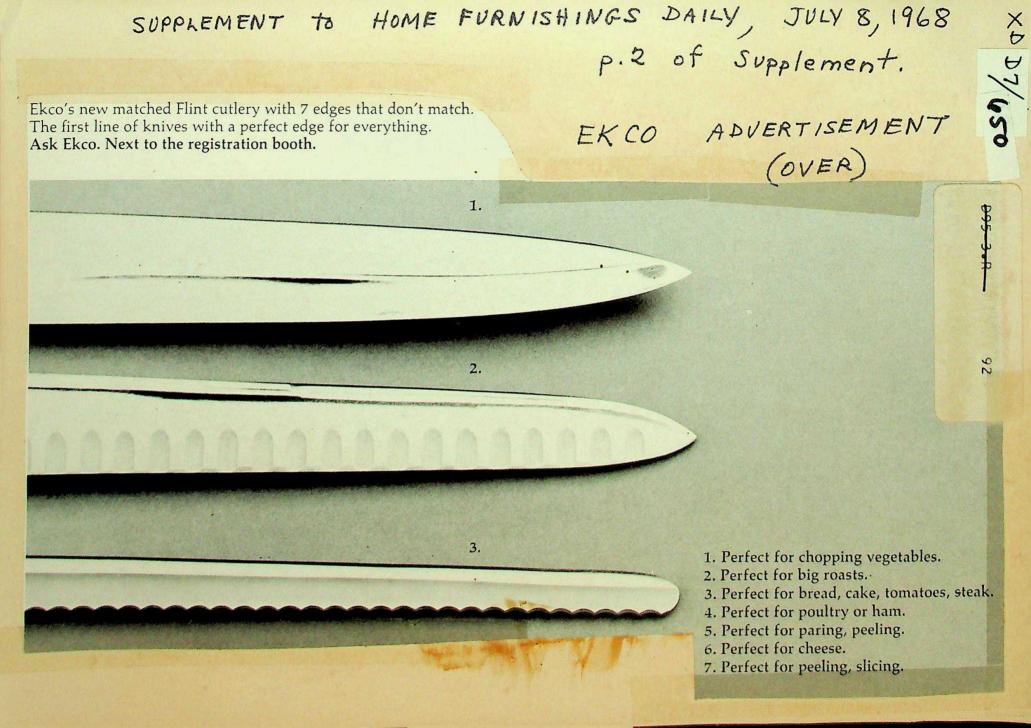
It is precision-made, shock-resistant, heat-resistant and reliable. Unlike ordinary meat thermometers, this instrument has needle-slim stem, enters meat without wasting precious juices. Complete with simple instructions sources timetable.

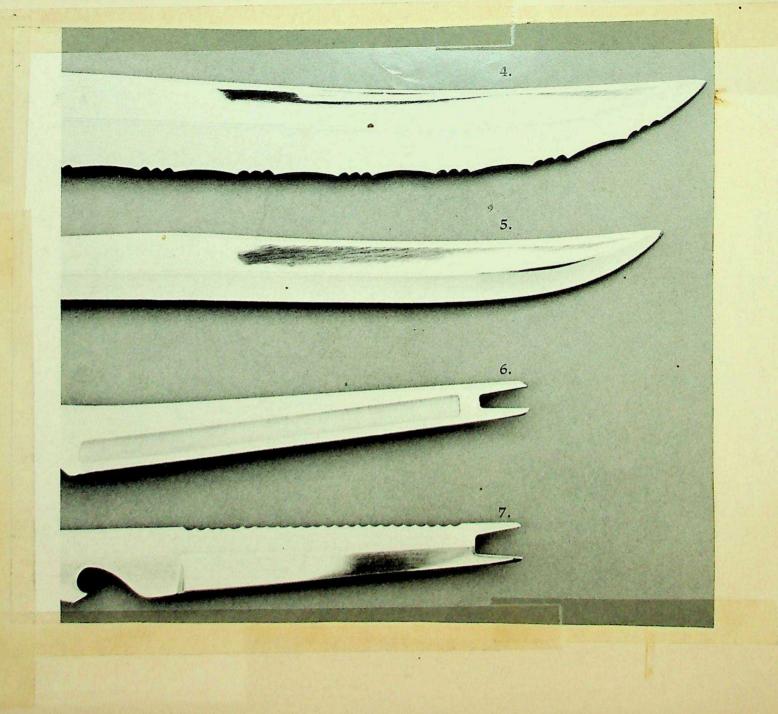
introctions, gourmet timetable.

If you think this sounds like a meat thermometer that should cost a lot of money. It should but it doesn't!

2985 The Brain Meat Thermometer

MAN'S WORLD Rec'd. 3/6/1972







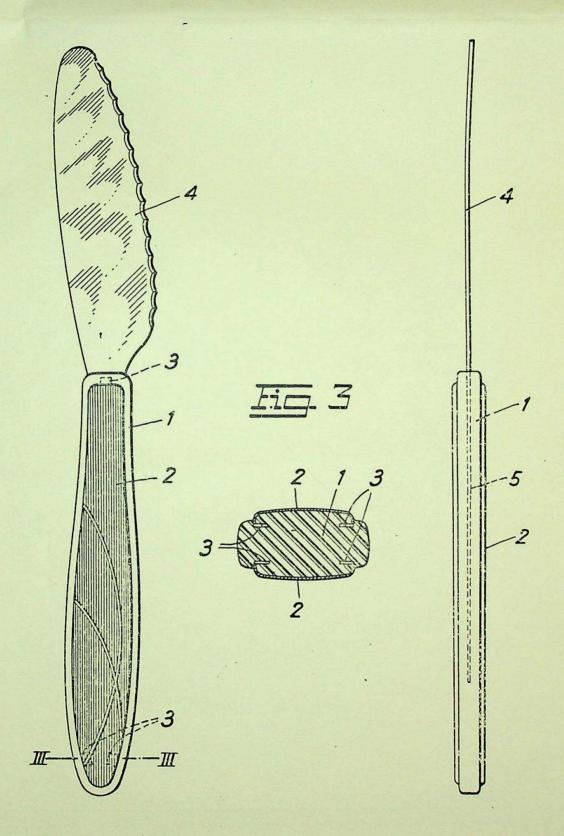


EKCO

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Fig. 2





Klassierung:

69, 18

Int. Cl.:

B 26 b

SCHWEIZERISCHE EIDGENOSSENSCHAFT

EIDGENÖSSISCHES AMT FÜR GEISTIGES EIGENTUM

Gesuchsnummer:

4763/62

Anmeldungsdatum:

18. April 1962, 181/2 Uhr

from 30/343

Patent erteilt:

15. Juni 1965

Patentschrift veröffentlicht: 15. November 1965

15 Nausmbar 106

DIV ...

HAUPTPATENT

Wenger S.A., Delémont

Messergriff

Max Oertli, Delémont, ist als Erfinder genannt worden

Es sind Messergriffe für Tafelmesser, Fruchtmesser und dergleichen bekannt, die aus Holz, Horn, Kunststoff oder Metall bestehen. Die Griffe aus nichtmetallischem Material befriedigen insofern nicht, als sie zu den Griffen der übrigen Bestecke, Löffel, Gabeln usw. nicht recht passen. Zudem werden sie nach relativ kurzer Gebrauchszeit oft unansehnlich. Die in verschiedenen Ausführungen bekannten Metallgriffe, die sich zu den Griffen der übrigen Bestecke sehr gut passend ausbilden lassen, kommen ziemlich teuer zu stehen. Das Verbinden der Klinge mit dem Griff, sei es durch Einkitten eines Angels oder durch Zusammenschweißen, ist kompliziert. Zudem sind solche Griffe vielfach zu schwer und fühlen sich kalt an.

Zur Vermeidung dieser Mängel ist der erfindungsgemäße Messergriff durch einen Griffkörper aus thermoplastischem Kunststoff mit abgeflachtem Querschnitt gebildet, auf dessen Seitenflächen Metallschalen verankert sind.

Im folgenden wird an Hand der beiliegenden Zeichnung ein Ausführungsbeispiel der Erfindung

Auf der Zeichnung zeigt:

Fig. 1 ein Messer mit einem erfindungsgemäßen 25 Griff von der Seite,

Fig. 2 das gleiche Messer vom Messerrücken her gesehen und

Fig. 3 einen Schnitt nach der Linie III-III in Fig. 1.

Der Griff besitzt einen aus einem thermoplastischen Kunststoff, z. B. aus dem unter der geschützten
Marke «Grillon» bekannten Kunststoff, bestehenden,
durch Spritzen hergestellten Griffkörper 1. Die Metallschalen 2 werden während des Spritzens in bekannter Weise mit dem Griffkörper vereinigt. Die
abgebogenen Ränder der Schalen sind in den Kunststoff eingegossen und können in bekannter Weise mit
Verankerungsmitteln, z. B. Verankerungsfahnen 3,
versehen sein.

Die Form des Griffes, die Farbe des Kunststoffes 40 und das Material der Schalen und ihre Dekoration lassen sich geschmackvoll den Griffen der übrigen Bestecke anpassen. Der Griff ist relativ leicht und fühlt sich nicht kalt an, da die Schalen dünn sein können. Die Vereinigung der Klinge 4 mit dem Griff 45 läßt sich sehr einfach bewerkstelligen.

Der entsprechend erwärmte Angel 5 der Klinge, der z. B. mit Widerhaken versehen sein kann, braucht nur in den Kunststoffkörper, der zu diesem Zweck bei der Herstellung auch mit einer Aussparung versehen werden kann, hineingedrückt zu werden und sitzt dort nach dem Erkalten zuverlässig fest.

PATENTANSPRUCH

Messergriff, gekennzeichnet durch einen Griffkörper (1) aus thermoplastischem Kunststoff mit abgeflachtem Querschnitt, auf dessen Seitenflächen Metallschalen verankert sind.

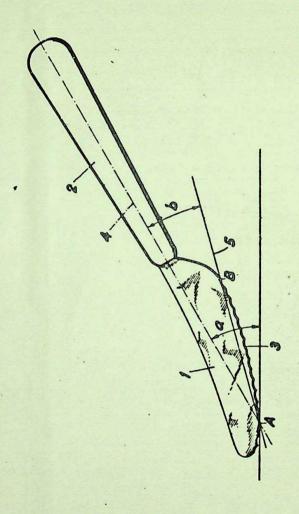
Wenger S. A.

Vertreter: Bovard & Cie., Bern



Jan. 31, 1959 SWISS

Patent Nr. 334745





SCHWEIZERISCHE EIDGENOSSENSCHAFT

EIDGENÖSSISCHES AMT FÜR GEISTIGES EIGENTUM

PATENTSCHRIFT

Veroffentlicht am 31. Januar 1959

\$20 2 4 1059 Kiasse 86

Max Oertli, Delémont (Bern), ist als Erfinder genannt worden

HAUPTPATENT

Wenger S. A., Delémont (Bern)

Gesuch eingereicht: 22. September 1955, 181/4 Uhr - Patent eingetragen: 15. Dezember 1958

Tischmesser

Gegenstand der Erfindung ist ein Tischmesser, welches dadurch gekennzeichnet ist, daß die Griffachse die konvex gekrümmte Messerschneide in ihrem vordern Teil unter einem Winkel von angenähert 30° schneidet, während der Winkel zwischen der Griffachse und der Geraden, die deren Schnittpunkt mit der Messerschneide mit dem hintern Schneidenende verbindet, angenähert 15° beträgt.

Es hat sich gezeigt, daß, wenn ein solches Tischmesser wie üblich so gehalten wird, daß seine Griffachse etwa unter 30° zur Schneidunterlage geneigt ist, es eine wesentslich bessere Schneidwirkung hat als ein übliches Tischmesser, bei dem die Schneide bzw. ihre Schne ungefähr parallel zur Griffachse verläuft. Man kann nämlich trotz der Neigung der Griffachse einen «zichenden Schnitt» erzielen, und das Messer hat weniger die Tendenz, das Schneidgut wegzuschieben.

Beiliegende Zeichnung stellt ein Ausführungsbeispiel des Erfindungsgegenstandes dar.

Beitenansicht in der Gebrauchslage.

Die Klinge des dargestellten Tischmessers ist mit 1 und der an dieser Klinge in bekannter Art und Weise befestigte Griff ist mit 2 bezeichnet.

Die Klinge 1 hat eine zackig geschliffene, konvex gekrümmte Messerschneide 3, die in ihrem vordern Teil von der Achse 4 des Griffes 2 unter einem Winkel a von angenähert 30° geschnitten wird. Der Schnitt- 15 punkt ist mit 1 bezeichnet. Der Winkel b zwischen der Griffachse 4 und der Geraden 5, die den Schnittpunkt 1 mit dem hintern Ende B der Messerschneide 3 verbindet, beträgt angenähert 15°.

PATENTANSPRUCH

Tischmesser, dadurch gekennze ehnet, daß die Griffschse die konvex gekrüm, de Messerschneide in ihrem vordern Teil viter einem Winkel von angenähert 30° sehn idet, wäh-45 rend der Winkel zwischen der Griffschse und der Geraden, die deren Schnittpunkt mit der Messerschneide mit dem hintern Schneidenende verbindet, angenähert 15° beträgt.

Wenger S. A. Vertreter: Bovard & Cie., Bern 92

INTERNAT. EL. B 261

GERMANY

x 17/650 Abb. 2 Abb. 3 Abb.5

Abb.4



DEC 2 1957

AUSLEGESCHRIFT 1013994

ANMELDETAG: 15. DEZEMBER 1955

BEKANNTMACHUNG DER ANMELDUNG UND AUSGABE DER

AUSLEGESCHRIFT: 14 AUGUST 1957

Die Erfindung betrifft ein Messer mit einer dunnen, vorzugsweise im Hohlschliff erzeugten Schneide und hat sich die Aufgabe gestellt, die Schneide mit Bezug auf ihre Schneidfähigkeit noch weiter zu verbessern.

Die Erfindung besteht demzufolge darin, daß eine 5 oder beide Schliffphasen der Messerklinge im Atzverfahren erzeugte, in bekannter Weise in die Schneidkante auslaufende Vertiefungen aufweisen.

Durch das neue Verfahren läßt sich die dünne bzw. hohlgeschliffene Klinge eines Messers an ihrer 10 Schneidkante noch weiter verdünnen, als es bisher durch Hohlschliff möglich war, und dadurch eine bisher nicht bekannte Schneidwirkung erzielen. Die Flächen der Vertiefungen sind dabei zweckmäßig größer, zumindest aber ebenso groß wie die zwischen den Ver- 15

tiefungen stehengebliebenen Flächen.

Es sind bereits Messer bekannt, deren Klinge zur Verbesserung der Schneide an einer oder beiden Flanken Vertiefungen aufweisen, die in die Schneidkante auslaufen und dabei Kantenausnehmungen bilden. 20 größertem Maßstab dargestellten Klinge des Messers Derartige vermittels eines spanabhebenden Werkzeuges beispielsweise in Form einer Schleifscheibe gebildete Vertiefungen lassen sich jedoch nur bei einer solchen Messerklinge erzeugen, deren Querschnitt im Bereich der Schneidkante noch einen Schleifvorgang 25 und zuläßt. Bei dünnen Messerklingen und solchen mit konvexen Flanken lassen sich dagegen Vertiefungen vermittels spanabhebender Werkzeuge nicht erzeugen, weil die Messerklingen infolge ihres im Bereich der Schneidkante geringen Querschnitts einen derartigen 30 Schleifvorgang nicht mehr erlauben. Es ist zwar bereits bekannt. Vertiefungen an den Flanken einer Messerklinge durch Ätzen zu erzeugen. Diese Vertiefungen, wie sie insbesondere an der Klinge eines zum Schneiden von weichem Gut dienenden Messers 35 erzeugt werden, dienen aber nicht zur Verbesserung der Klingenschneide, sondern sollen lediglich verhüten, daß stark klebendes Schneidgut bei Vollziehung des Schnittes an der Messerklinge haftenbleibt. Mit Rücksicht auf diese Aufgabe reichen die Vertiefungen 40 im Gegensatz zu den erfindungsgemäß erzeugten auch nur bis an die Schneidkante heran, wie auch ihre Flächen kleiner sind als die nach dem Ätzen stehengeblie-

In der Zeichnung ist die Erfindung in zwei Aus- 45 führungsbeispielen an einem mit einer hohlgeschliffenen Klinge ausgestatteten Messer veranschaulicht. Es zeigt

Abb. 1 das Messer in Ansicht,

Messer mit im Hohlschliff erzeugter Schneide

Anmelder:

Fa. Anton Wingen jr., Solingen, Gasstr. 54

Heinz Wingen, Solingen, ist als Erfinder genannt worden

Abb. 2 einen Teil der gegenüber Abb. 1 in verin Draufsicht auf die Vertiefungen aufweisende Flanke und

Abb. 3 in Rückansicht,

Abb. 4 einen Schnitt nach der Linie a-a der Abb. 2

Abb. 5 an einer teilweise und in vergrößertem Maßstab dargestellten Messerklinge ein anderes Ausführungsbeispiel der Erfindung.

Das Messer besteht aus der Klinge 1, deren Schneidkante 2 durch Hohlschliff erzeugt ist, und dem Griff 3.

Die eine Schliffphase der Klinge 1 weist im Atzverfahren erzeugte Vertiefungen 4 auf, die in dem Ausführungsbeispiel der Abb. 1 bis 4 zu der Schneidkante 2 schräg verlaufen.

In dem Ausführungsbeispiel der Abb. 5 bilden die Vertiefungen 4 mit der Schneidkante 2 einen rechten Winkel.

Die Vertiefungen können selbstverständlich auch andere Formen aufweisen.

PATENTANSPRUCH:

Messer mit im Hohlschliff erzeugter Schneide, dadurch gekennzeichnet, daß eine oder beide Schliffphasen der Messérklinge im Ätzverfahren erzeugte, in bekannter Weise in die Schneidkante auslaufende Vertiefungen aufweisen.

In Betracht gezogene Druckschriften: Französische Patentschrift Nr. 875 874.

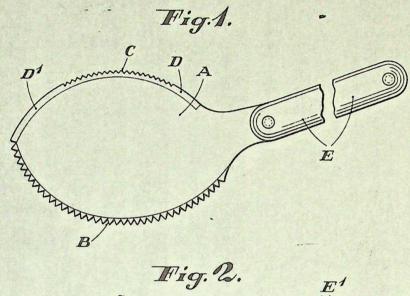
Hierzu 1 Blatt Zeichnungen

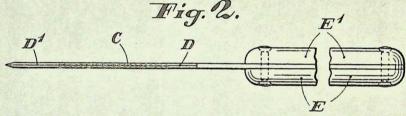
955

Louis Helfer

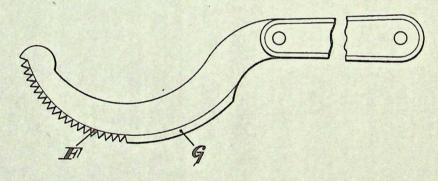
Brevet Nº 251959

1 feuille









BUREAU FÉDÉRAL DE LA PROPRIÉTÉ INTELLECTUELLE

COPY

EXPOSÉ D'INVENTION

DIV.

Publié le 1er septembre 1948

Classe 86

Demande déposée: 7 mars 1946, 121/4 h. — Brevet enregistré: 30 novembre 1947.

1030

BREVET PRINCIPAL

Louis Helfer, Petit-Lancy (Genève, Suisse).

Couteau à découper la pâte cuite.

L'invention a pour objet un couteau à découper la pâte cuite des tartes, gâteaux aux fruits ou toutes autres pâtes employées par les boulangers et les pâtissiers.

5 Ce couteau n'a pas pour but de couper la pâte comme un couteau à lame ordinaire auquel on imprime des mouvements de translation; il a pour but de rompre la pâte, et il est caractérisé par une lame en arc dont un 10 bord travaillant comporte une denture destinée à briser la pâte par une pression et un mouvement de balancement de ladite lame.

Le dessin ci-joint montre, à titre d'exemple, deux formes d'exécution de ce couteau, 15 respectivement en fig. 1 et 2 et en fig. 3.

Dans la forme d'exécution représentée en fig. 1 et 2, A est une spatule de forme ovale comportant sur l'un des bords une denture B dont les dents très pointues pénètrent sans grand effort dans la pâte pour la briser. Sur l'autre bord, en D et D¹, la spatule présente une partie tranchante dont le but est de trancher, par un mouvement de balancement, la pâte qui ne serait pas brisée complètement par la pénétration des dents de la partie B de la spatule. Sur le bord opposé à la denture B, une petite denture C sert à scier le rebord d'une tarte avant de procéder au découpage des tranches.

La fig. 2 montre l'épaisseur de la spatule, avec un prolongement qui permet la fixation de deux flasques en matière non métallique E, E¹ pour servir de manche. Cette spatule est pratique pour relever les tranches so découpées. La fig. 3 représente une forme d'exécution comportant une lame en arc dont le bord convexe comprend une partie dentée F pour briser la pâte, par un mouvement de balancement, et une partie tranchante G dont le but G est de trancher ensuite, par un mouvement de balancement, la pâte qui ne serait pas brisée complètement.

REVENDICATION:

Couteau à découper la pâte cuite, carac- 45 térisé par une lame en arc dont un bord travaillant comporte une denture destinée à briser la pâte par une pression et un mouvement de balancement de ladite lame.

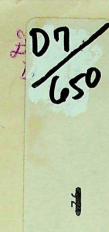
SOUS-REVENDICATIONS:

1. Couteau suivant la revendication, caractérisé en ce que les dents sont pointues.

2. Couteau suivant la revendication et la sous-revendication 1, caractérisé en ce qu'il constitue une spatule de forme ovale com- 55 portant, sur l'un des bords, des dents pour briser la pâte, et, sur le bord opposé, une partie tranchante dont le but est de trancher, par un mouvement de balancement, la pâte qui ne serait pas brisée complètement 60 par la pénétration des dents susdites.

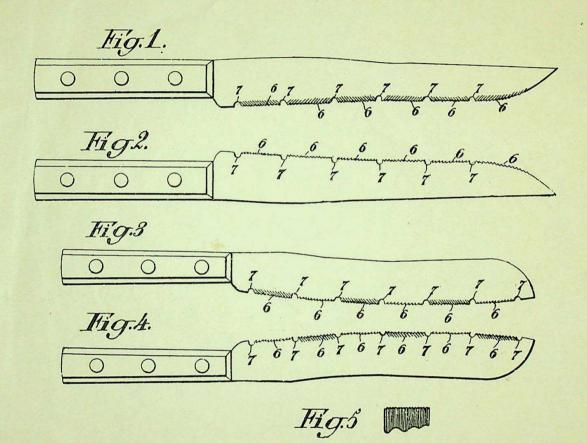
3. Couteau suivant la revendication et les sous-revendications 1 et 2, caractérisé en ce que ledit bord opposé aux susdites dents pointues comporte en outre une petite den- 65 ture servant à scier le rebord d'une tarte avant de procéder au découpage des tranches.

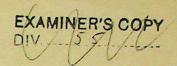
Louis Helfer. Mandataire: Fl. Rabilloud, Genève.



your of

Patent nr. 44802









PATENT

Nr. 44802

KLASSE 69

FREMSTILLING

MED TILHØRENDE TEGNING

OFFENTLIGGJORT AV STYRET FOR DET INDUSTRIELLE RETSVERN

23de januar 1928

Kniv.

Joseph Edward Burns av Syracuse, N. Y., U. S. A.

(Fuldmægtig: Ingeniør Ths. Berg i firma Bryns Patentkontor, Oslo).

Patent i Norge fra 5te oktober 1926.

I henhold til den internationale konvention kræver patenthaveren ifølge til Styret indlevert dokument prioritet for nærværende patent fra 6te oktober 1925, da patentkrav blev indgit i U. S. A.

Opfindelsen vedrører anordninger ved kniver av alle arter. Den er paa hosføiede tegning vist anvendt ved brødkniver. Hovedhensigten med opfindelsen er at tilveiebringe en kniv som skjærer bedre og renere end de hittil anvendte kniver.

Fig. 1 viser et skjæreredskap i henhold til opfindelsen set fra siden.

Fig. 2 er et lignende siderids set fra den motsatte side.

Fig. 3 og 4 er siderids svarende til fig. 1 og 2 av en anden utførelsesform for kniven.

Fig. 5 viser en del av et slipehjul egnet for knivens fremstilling.

Kniven i henhold til opfindelsen er forsynt med et antal rækker 6 av skraatstillede riller, hvorved der altsaa dannes et antal rækker av forholdsvis smaa nøiagtig formede slipte tænder, hvor rillene og tænderne i hver række er skraatstillet i forhold til redskapets egg og ogsaa skraatstillet i forhold til rillene i de tilstøtende rillerækker med mellemliggende tænder. Samtlige rillerækker 6 kan slipes paa en og samme side av kniven, saaledes som vist paa fig. 1 og 2, eller ogsaa kan rillene avvekslende slipes paa motsat side av kniven, saaledes som vist paa fig. 3 og 4.

Resultatet av denne motstaaende skraatstilling av de paa hinanden følgende rillerækker er tilveiebringelsen av eggavsnit med kileformet mot eggen skraanende tænder. kniven.

Den indbyrdes avstand mellem disse rillerækker kan enten som vist være like stor for hele knivens vedkommende eller om ønskes varieres.

Den muligens bedste maate til at faa eggen formet saaledes som vist paa tegningen er at anvende en roterende slipehjul forsynt med en flerhet av langs periferien forløpende, paralelle, jevne rifler av V-form adskilt ved trange riller likeledes av V-form. Naar man holder kniven under passende skraastilling i kontakt med det paa fig. 5 viste hjul under dettes rotation kan en komplet rilleeller tandrække 6 bli slipt samtidig, og ved denne fremgangsmaate blir avstanden og tilformningen av rillene eller tænderne muligens mere jevn end man ellers vil kunne opnaa. Ved den motsatte skraastilling av de tilstøtende rillerækker faar man en mellemliggende ikke fortandet del. Ansøkeren har fundet, at ved at slipe væk denne del mellem de ved siden av hinanden liggende rilierækker, saaledes at der tilveiebringes en forheldsvis stor fordypning 7 som adskiller rillerækkene, og den rette egg mellem disse helt fjernes, opnaar man en meget forbedret skjæreegg, som har et bedre og renere snit. Resuitatet er omtrent det samme enten alle rilleog tandrækker slipes paa den ene side av kniven eller avvekslende den ene paa den ene side og den anden paa den anden side av

69 (34 b, 38 a) - 36106

Tringe.

Paa de paa tegningen viste utførelsesformer er der anordnet fem indhak 7 i kniveggen, saaledes at der blir et indhak paa hver side av rillerækkene, og dette indhak er vist utført omtrent halveirkelformet med en radius svarende omtrent til rillelængdene, saaledes at skjæreeggen kommer til-at bestaa utelukkende av en flerhet av rillerækker, av hvilke hver bestaar av en flerhet av omtrent V-formede riller, som blir dypere i retning av eggen og skjærer ind i og bryter egglinjens sammenhæng, saaat der dannes en flerhet av i det væsentlige like V-formede tænder, og hvor hver av disse rækker er adskilte fra naborækkene ved en større fordypning i eggen, saaat den effektive skjæreegg utelukkende dannes av disse tænder eller indhak.

Patentpaastande:

1. Kniv hvis skjæreegger er dannet av flere rækker av skraatstillede riller, som igjen danner smaa, slipte tænder, karakterisert ved, at rillene i hver av disse rækker (6) er skraatstillet i forhold til eggen i en retning avvikende fra skraastillingen i de tilstøtende rækker og at de derved dannede tænder ligger i eggens plan.

'2. Kniv i henhold til paastand 1, karakterisert ved, at der paa i og for sig kjendt maate er anordnet indhak (7) i eggen mellem de til hinanden støtende rillerækker (6), saaledes at eggen blir bestaaende utelukkende av rillerækker med tænder adskilte ved mellem-

rum.

247,768 COMPLETE STATION

[This Drawing is a reproduction of the Original on a reduced scale]

1 SHEET

Fig. 6. 'r Fig. 7.

Charles & Read Ltd. Photo Litho

SPECIFICATION PATENT



Application Date: March 27, 1925. No. 8215 / 25.

247,768

Complete Left: Dec. 11, 1925. Complete Accepted: Feb. 25, 1926.

PROVISIONAL SPECIFICATION.

Improvements relating to Knives for Cutting Bread, or for other uses.

I, ERNEST NORTH, British subject, of Mount Orgueil, Burman Road, Shirley, near Birmingham, do hereby declare the nature of this invention to be as 5 follows:-

This invention relates to knives for cutting bread, or for other uses, such knives being of that type wherein a series of separated grooves are ground or 10 milled in the side of the blade of the knife adjacent the cutting edge, the said grooves terminating in notches formed in the said edge, so that a saw-like forma-tion is imparted to the latter. The 15 object of the present invention is to pro-

vide an improved construction of knife of this type whereby a more efficient cutting action is obtained.

Hitherto, the grooves have been formed 20 in the one side of the blade of the knife only, but according to the present inven-tion it is proposed to form the grooves alternately first in the one side and then in the other side of the blade, whilst,

25 preferably, a cannel or bevel is formed along the cutting edge upon the under side of the blade, assuming the knife to be in the normal horizontal cutting posi-tion, the upper side of the blade being 30 ground flat. The alternate arrangement of

the grooves gives an improved cutting action, the efficiency of which is materially increased by the aforesaid cannel or bevel. Where a cannel or

35 bevel has been provided it has previously been formed upon the top side of the blade and not upon the underside, as in the present arrangement.

Thus, in carrying out the invention, Thus, in carrying out the invention, the improved knife is formed adjacent its cutting edge and at right-angles thereto with a series of short semi-circular sectional grooves. These grooves are formed by a grinding or milling operation which leaves them with clean cut

edges, and they are disposed alternately first upon the one side and then upon the other side of the blade of the knife, each groove becoming gradually deeper towards the cutting edge where they 50 each terminate in a semi-circular or Ushaped notch formed in the latter, the notches, which are formed during the grinding of the grooves, being disposed at separated distances apart and extend- 55 ing throughout the length of the cutting edge of the knife. The underside of the blade, assuming the knife to be held in its normal horizontal cutting position, is formed adjacent its cutting edge with a 60 cannel or bevel, whilst the requisite sharpness is given to the knife by grinding the opposite or upper side of the blade flat.

The improved knife, constructed in the 65 above manner, has a very efficient cutting action which is particularly suitable for cutting bread, although it may be used for other purposes. To give the most efficient results a saw-like motion should 70 be given to the knife during cutting operation. The efficiency of the knife is primarily due to the alternate disposi-tion of the grooves, although, as tion of the grooves, although, as previously stated, the cutting action is 75 considerably improved owing to the bevel or cannel upon the underside of the blade. If the cannel be formed upon the upper side of the blade the cutting efficiency of the knife is considerably 80 diminished.

It is obvious that the notches may be disposed at any suitable distance apart, whilst the grooves communicating therewith may be of any desired length.

85

Dated this 26th day of March, 1925.

H. N. & W. S. SKERRETT, 24, Temple Row, Birmingham, Agents for Applicant.

[Price 1/-]